To: Grandinetti, Cami[Grandinetti.Cami@epa.gov]

From: Robinson, Deborah

**Sent:** Mon 3/14/2016 10:07:00 PM

Subject: RE: Portland Harbor FS- Remedial Alternative Cost Estimate Summary

Who is Jed?

Thanks,

Debbie

\_\_\_\_\_

From the Desk of: Debbie Robinson Tel: 206-553-4961

robinson.deborah@epa.gov

US EPA Region 10, M/S ECL 122, 1200 Sixth Avenue, Suite 900, Seattle, WA 98101

From: Grandinetti, Cami

Sent: Monday, March 14, 2016 12:53 PM

To: Robinson, Deborah < Robinson. Deborah@epa.gov>

Subject: FW: Portland Harbor FS- Remedial Alternative Cost Estimate Summary

From: Sheldrake, Sean

Sent: Monday, March 14, 2016 10:41 AM

To: Grandinetti, Cami < Grandinetti. Cami@epa.gov >; Zhen, Davis < Zhen. Davis@epa.gov >

Subject: FW: Portland Harbor FS- Remedial Alternative Cost Estimate Summary

Cami, Davis, In case you wanted to see this right away. S

p.s. Davis, I'm working on figuring out if I can get myself Personal Privacy / Ex. 6 will get with you once I know more.

Sean Sheldrake, Unit Diving Officer, RPM

EPA Region 10, 1200 Sixth Ave., Suite 900; Mailstop DOC-01

Seattle, WA 98101

206.553.1220 desk

Personal Privacy / Ex. 6 Cell

http://yosemite.epa.gov/r10/cleanup.nsf/sites/ptldharbor

http://www.epa.gov/region10/dive/

206.553.6379 Dive Operations Center

206.369.7500 Dive Unit cell

Like us on Facebook! https://www.facebook.com/EPADivers

From: Hazen, Gary [mailto:HazenGL@cdmsmith.com]

**Sent:** Friday, March 11, 2016 6:03 PM

**To:** Koch, Kristine < Koch. Kristine@epa.gov>; Allen, Elizabeth < allen.elizabeth@epa.gov>;

Sheldrake, Sean < sheldrake.sean@epa.gov>

Cc: Coffey, Scott < CoffeySE@cdmsmith.com >; Jones, Jennifer M.

<JonesJM@cdmsmith.com>; Nielsen, Justin C. <nielsenjc@cdmsmith.com>; Broadstone, Abby

<BroadstoneAR@cdmsmith.com>

Subject: Portland Harbor FS- Remedial Alternative Cost Estimate Summary

Good evening-

Attached is a table providing the cost summary information for Alternatives B through I. These costs reflect the final quantity numbers as developed by CDM Smith as well as the final unit costs developed during the "deep dive" process.

It should be noted that this table reflects the direction this morning on alternative renaming-Alternative H is the "bank to bank" alternative and Alternative I is the "optimized" alternative. Costs are provided for DMM Scenario 2 (offsite disposal); costs are also provided for DMM Scenario 1 (the CDF option) where applicable- specifically for Alternatives E though I. The cost for the optimized alternative DMM Scenario 2 (Alt I) remains unchanged from the costs previously provided for briefing the EPA Administrator.

As discussed this morning, Alternative H used the "Year 0" simplifying assumption for capital costs which in conjunction with the primary difference (quantity increases) explains the significant cost difference between Alternative G and Alternative H.

Please let us know if you have any questions-thank you.

## Gary L. Hazen, P.E. R.G.

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